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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GEORGE R. BORDEN IV

Appeal 2008-4312
Application 10/627,345
Technology Center 2100

Decided:[1] May 6, 2009

Before HOWARD B. BLANKENSHIP, ST. JOHN COURTNEY, III, and STEPHEN C. SIU, *Administrative Patent Judges.*

SIU, *Administrative Patent Judge.*

DECISION ON APPEAL

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[1] The two month time period for filing an appeal or commencing a civil action, as recited in 37 CFR § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

STATEMENT OF THE CASE

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 11–30. Claims 1–10 have been canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Invention

The invention described in the patent application relates to aural user interfaces in which aural cues are given to help the user determine which item is currently selected and which direction in the list the user is navigating (Spec. 1, 5, and 6).

Independent claim 11 is illustrative:

> 11. An aural user interface for interactively navigating through a collection of data organized into at least one hierarchical set of data and from an arbitrary set of data within said hierarchical structure, said interface comprising
>
> (a) a first input for navigating upward through said hierarchical structure;
>
> (b) a second input for navigating downward through said hierarchical structure;
>
> (c) a first aural signal associated with said first input having a first characteristic indicating to a user upward navigation through said hierarchical structure from an arbitrary data point, said first characteristic independent of the set of data from which upward navigation commences;
>
> (d) a second aural signal associated with said input having a second characteristic audibly different than said first audio characteristic indicating to a user downward navigation through said hierarchical structure from said arbitrary data point, said second

characteristic independent of the set of data from which downward navigation commences;

(e) a frequency range associated with said first aural signal that is dependent on the size of the data set comprising the hierarchical set of data;

(f) a frequency range associated with said second aural signal that is dependent on the size of the data set comprising the hierarchical set of data.

References

The Examiner relies upon the following references as evidence in support of the rejections:

Vallone	US 6,642,939 B1	Nov. 4, 2003 (filed Mar. 30, 2000)
Peterson	US 5,652,714	Jul. 29, 1997
Auflick	US 6,820,238 B1	Nov. 16, 2004 (filed Feb. 19, 2002)
McKiel, Jr.	US 5,287,102	Feb. 15, 1994

International Business Machines Corporation, *Method for providing position relative audio feedback in a scrollable content area*, Research Disclosure 41878, Feb. 1999. ("IBM-41878".)

Rejections

The Examiner rejects claims 11, 12, 15, 19–22, 25, 29, and 30 under 35 U.S.C. § 103(a) as being unpatentable over Vallone, Peterson, and IBM-41878; claims 13, 14, 23, and 24 under 35 U.S.C. § 103(a) as being unpatentable over Vallone, Peterson, IBM-41878, and Auflick; claims 16 and 26 under 35 U.S.C. § 103(a) as being unpatentable over Vallone, Peterson, and IBM-41878, in light of the taking of official notice; and claims

17, 18, 27, and 28 under 35 U.S.C. § 103(a) as being unpatentable over Vallone, Peterson, IBM-41878, and McKiel, Jr.

Appellant's Contentions

Appellant argues that IBM-41878 does not teach the limitation of a frequency range that is dependent on the size of a data set because IBM-41878 is limited to "indicating the relative position of a selected item in the list" (App. Br. 7) and "fixed upper and lower [frequency] bounds" (Reply Br. 4). Furthermore, Appellant argues that "the number of incremental steps heard within that range [in IBM-41878] does not depend on the size of the data set itself, but the *relative* size of the data set compared to the size of the view port window" (Reply Br. 5).

In the Reply Brief, Appellant introduced a new argument that Peterson does not teach or suggest a first aural signal, associated with a first input, having a first characteristic and a second aural signal, associated with a second input, having a second characteristic audibly different than the first audio characteristic (Reply Br. 5).

Examiner's Findings/Conclusions

The Examiner finds that the meaning of range includes "the set of all values attained by a given function throughout its domain" so that "the *rate of change* of the frequency [in IBM-41878] varies based on the relative size of the total content" (Ans. 12).

ISSUE

Has Appellant shown that the Examiner erred in finding that IBM-41878 teaches or suggests the limitation of a frequency range that is dependent on the size of a data set, as recited in independent claims 11 and 21?

FINDINGS OF FACT

The following Findings of Facts (FF) are shown by a preponderance of the evidence.

1. The term "range" may be defined as "the limits of a series" and "the set of values a function may take on." *Merriam Webster's Collegiate Dictionary* 967 (10th ed. 1997).
2. IBM-41878 teaches "playing audio feedback based on the current size and position of scrollable content within a window being displayed [where the] audio feedback mechanism is an audio tone which varies over a given octave range as the content area is scrolled [and the] rate of the change in frequency is governed by the relative size of the total content contained within the scroll area compared to the scroll view port" (ll. 1–3 and 6–8).

PRINCIPLES OF LAW

Obviousness

Section 103(a) forbids issuance of a patent when "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to

> a person having ordinary skill in the art to which said subject matter pertains."

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 406 (2007).

"What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under § 103." *Id.* at 419. In *KSR*, the Supreme Court emphasized "the need for caution in granting a patent based on the combination of elements found in the prior art," *id.* at 415, and discussed circumstances in which a patent might be determined to be obvious. *Id.* at 415–16 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966)). The Court reaffirmed principles based on its precedent that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 416. The operative question in this "functional approach" is thus "whether the improvement is more than the predictable use of prior art elements according to their established functions." *Id.* at 415, 417.

Claim Interpretation

The scope of patent application claims are not determined "solely on the basis of the claim language, but upon giving claims their broadest reasonable construction in light of the specification as it would be interpreted by one of ordinary skill in the art." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc) (citations omitted).

New Arguments

"[I]t is inappropriate for appellants to discuss in their reply brief matters not raised in . . . the principal brief[ ]. Reply briefs are to be used to

reply to matter[s] raised in the brief of the appellee." *Kaufman Company v. Lantech, Inc.*, 807 F.2d 970, 973 n.* (Fed. Cir. 1986). "Considering an argument advanced for the first time in a reply brief . . . is not only unfair to an appellee . . . but also entails the risk of an improvident or ill-advised opinion on the legal issues tendered." *McBride v. Merrell Dow and Pharms., Inc.*, 800 F.2d 1208, 1211 (D.C. Cir. 1986) (internal citations omitted).

> There are cogent reasons for not permitting an appellant to raise issues or arguments in a reply brief. Among them are the unfairness to the appellee who does not have an opportunity to respond and the added burden on the court that a contrary practice would entail. As the Tenth Circuit put it, permitting an appellant to raise new arguments in a reply brief "would be unfair to the court itself, which without the benefit of a response from appellee to an appellant's late-blooming argument, would run the risk 'of an improvident or ill-advised opinion, given [the court's] dependence . . . on the adversarial process for sharpening the issues for decision.'"
>
> *Carbino v. West*, 168 F.3d 32, 34–35 (Fed. Cir. 1999) (citing *Headrick v. Rockwell Int'l Corp.*, 24 F.3d 1272, 1278 (10th Cir. 1994) (quoting *Herbert v. Nat'l Academy of Sciences*, 974 F.2d 192, 196 (D.C. Cir. 1992)).

ANALYSIS

Based on Appellant's arguments in the Appeal Brief, we will decide the appeal on the basis of claims 11 and 21. *See* 37 C.F.R. 41.37(c)(1)(vii).

The Examiner's interpretation of the meaning of frequency range is consistent with the Specification, which cites setting upper and lower frequency bounds dependent on the size of a list as example embodiments

(Spec. 6, ll. 19–27), but does not preclude embodiments employing the plain meaning of the word "range" (FF 1). With IBM-41878, navigating through a large data set would result in more frequencies being used for the audio feedback mechanism than navigating through a small data set, because the rate of the change in frequency depends on the size of the content relative to the scroll view port (FF 2). Thus, the Examiner has shown that IBM-41878 teaches the limitation of a frequency range that is dependent on the size of a data set.

IBM-41878 teaches this limitation even with Appellant's interpretation of the meaning of range. As Appellant points out, "the frequency of the audible signal emitted when a user is scrolling over the midway (50%) point of the entire data set within the scroll area *is the same, irrespective of the size of the data set*" (App. Br. 7). The midway point in a data set of size n would be $n/2$. In a data set of size $n+m$ (where $m>0$), the midway point would be $(n+m)/2$, thus the frequency of the audible signal emitted when a user is scrolling over the point $n/2$ would be different given the larger size of the data set. This means that two frequency ranges in IBM-41878—the frequency range from the beginning of the data set to $n/2$ and the frequency range from $n/2$ to the end of the data set—depend on the size of the data set.

Appellant's point that the number of incremental frequency steps employed in IBM-41878 depends on the relative size of the data set compared to the size of the view port window does not change the analysis. For any given view port window size, the number of incremental frequency

steps employed will depend on the size of the data set. Moreover, Appellant's claims do not require that the size of the data set be the sole frequency range determiner.

Appellant newly argues in the Reply Brief that "[in the Peterson reference] there is neither the disclosure of, nor motivation for, the claimed 'second aural signal associated with said second input *having a second characteristic audibly different than said first audio characteristic . . . .*" (Reply Br. 5). The Examiner set forth findings in the Final Rejection mailed July 25, 2006 at page 3 pertaining to the disputed feature, however, Appellant failed to address the issue in Appellant's Brief filed November, 20, 2006. The Appellant had adequate notice of the Examiner's position and should have addressed this position in the principal Brief on appeal. The filing of a Reply Brief is not to be construed as permission to present arguments that should have been raised initially in the principal Brief on appeal. To permit Appellant to present such arguments would essentially prejudice the appellate process since the Examiner is not permitted to reply for our benefit to responses generally made in the Reply Brief. Hence, Appellant's arguments presented in the Reply Brief regarding this limitation are considered to be untimely and have been effectively waived by Appellant. We will therefore not consider Appellant's new arguments presented at pages 5-6 of the Reply Brief.

For at least these reasons, we conclude that Appellant has not sustained the requisite burden on appeal in providing arguments or evidence

persuasive of error in the Examiner's rejection of independent claims 11 and 21, and of dependent claims 12–20 and 22–30, which fall therewith.

CONCLUSION OF LAW

Based on the findings of facts and analysis above, we conclude that Appellant has failed to demonstrate that the Examiner erred in finding that IBM-41878 teaches or suggests a frequency range that is dependent on the size of a data set.

DECISION

We affirm the Examiner's decision rejecting claims 11–30 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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